Gerasimos Lampouras
Curriculum Vitae

1. CONTACT INFORMATION

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2. RESEARCH INTERESTS

Artificial Intelligence, especially **natural language processing**, and particularly:

- **natural language generation** from ontologies, especially Semantic Web ontologies,
- natural language **question answering** for ontologies, document collections, and the Web,
- **text summarization**, and how it can be combined with natural language generation,
- **natural language processing tools** for Greek, for example part-of-speech taggers and named-entity recognizers,
- **machine learning** and **global optimization approaches** in natural language processing.

3. WORK EXPERIENCE

April 2015 - Today: Research Associate in the EPSRC DILiGENt project,
Machine Reading Group, Department of Computer Science, University College London (UCL), from April 2015 to September 2015, and
Department of Computer Science, University of Sheffield, from October 2015 till today.

I am working on developing a domain-independent Natural Language Generation framework by imitating generation policies from unaligned corpora. This will be applied to a variety of domains, as well as weather reports and data obtained from the Met Office.

May 2014 - Sept 2014: Research Assistant in the European FP7 ICT BioASQ project, Department of Informatics, Athens University of Economics and Business (AUEB).

I employed a natural language generation system (coded in JAVA), and authored the required linguistic resources, to automatically produce natural language descriptions from the formal representations of biomedical ontology entities and classes in OWL2. I organized and conducted human judge experiments that evaluated the produced descriptions.

March 2011 – August 2012: Research Assistant in the "A Linear Programming approach to multi-document text summarization and natural language generation from ontologies", Athens University of Economics and Business (AUEB) Basic Research Funding Program (BRFP) project.

I participated in the formulation of an Integer Linear Programming model for multi-document summarization, and the formulation, implementation, and experimental evaluation of an Integer Linear Programming model for natural language generation.

March 2008 – January 2010: Research Assistant in the European FP6 IST INDIGO project, Department of Informatics, Athens University of Economics and Business (AUEB).

I participated in the development and maintenance of a natural language generation system (coded in JAVA); it automatically produced natural language descriptions from the formal representation of classes and entities (e.g. exhibits of a museum) in OWL by employing lexical and user modeling resources in RDF. Furthermore, I developed techniques to automatically

tailor dynamic finite state grammars that the project's automatic speech recognition system used as a language model, in order for the system to more easily recognize (and provide answers to) expected follow-up questions for each natural language description. I participated on the system's integration to a robotic platform and was responsible for testing the platform and evaluating its functionality.

4. TEACHING EXPERIENCE (as teaching assistant)

4.1 Undergraduate courses

- ***Artificial Intelligence*** (2010 – 14). Dept. of Informatics, AUEB.
- ***Computer Programming in Java*** (2009 – 12) Dept. of Informatics, AUEB.

4.2 Postgraduate courses

- ***Logic and Artificial Intelligence*** (2011). Dept. of Informatics, AUEB.

5. STUDIES

March 2009 – January 2015: Department of Informatics, Athens University of Economics and Business, Greece. **PhD in Artificial Intelligence**.
Thesis title: *Natural language interaction with Semantic Web Ontologies.*
Research Funding Program: Heracleitus II.

October 2006 – June 2008: Department of Informatics, Athens University of Economics and Business, Greece. **MSc in Computer Science**. Grade: 8.58/10.
Dissertation title: *Methods to automatically detect definitions in document collections.*
Dissertation grade: 10/10.
Scholarships earned in the first (3rd position) and second semester (1st position).

October 2002 – July 2006: Department of Informatics, Athens University of Economics and Business, Greece. **BSc in Informatics**, Computer Science theme. Grade: 7.22/10.
Dissertation title: *Revision and larger-scale experimental evaluation of a method to handle definition questions in question answering systems.* Dissertation grade: 10/10.

6. PUBLICATIONS

6.1 Journal articles

I. Androutsopoulos, G. Lampouras and D. Galanis, **"Generating Natural Language Descriptions from OWL Ontologies: the NaturalOWL System"**. *Journal of Artificial Intelligence Research, 48:671-715, 2013.*

6.2 Conference articles

G. Lampouras and I. Androutsopoulos, "**Using Integer Linear Programming for Content Selection, Lexicalization, and Aggregation to Produce Compact Texts from OWL Ontologies"**. *Proceedings of the 14th European Workshop on Natural Language Generation (ENLG 2013), at the 51st Annual Meeting of the Association for Computational Linguistics (ACL 2013), Sofia, Bulgaria, pp. 51-60, 2013.*

G. Lampouras and I. Androutsopoulos, **"Using Integer Linear Programming in Concept-to-Text Generation to Produce More Compact Texts"**. *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics (ACL 2013), Sofia, Bulgaria, pp. 561-566 (short papers), 2013.*

D. Galanis, G. Lampouras and I. Androutsopoulos, **"Extractive Multi-Document Summarization with Integer Linear Programming and Support Vector Regression"**. *Proceedings of the 24th International Conference on Computational Linguistics (COLING 2012), Mumbai, India, 2012.*

G. Lampouras and I. Androutsopoulos, **"Finding Short Definitions of Terms on Web Pages"**. *Proceedings of the 2009 Conference on Empirical Methods on Natural Language Processing (EMNLP 2009 at ACL/IJCNLP 2009), Suntec, Singapore, 2009.*

6.3 System demonstrations at conferences

D. Galanis, G. Karakatsiotis, G. Lampouras and I. Androutsopoulos, **"An Open-Source Natural Language Generator for OWL Ontologies and its Use in Protégé and Second Life"**. *System demonstration, 12th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2009), Athens, Greece, 2009.*

S. Konstantopoulos, A. Tegos, D. Bilidas, I. Androutsopoulos, G. Lampouras, P. Malakasiotis, C. Matheson and O. Deroo, **"Adaptive Natural Language Interaction"**. *System demonstration, 12th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2009), Athens, Greece, 2009.*

G. Karakatsiotis, D. Galanis, G. Lampouras and I. Androutsopoulos, **"NaturalOWL: Generating Texts from OWL Ontologies in Protégé and in Second Life"**. *System demonstration, 18th European Conference on Artificial Intelligence (ECAI 2009), Patras, Greece, 2008.*

6.4 Technical reports

I. Androutsopoulos, G. Lampouras and D. Galanis, **"Generating Natural Language Descriptions from OWL Ontologies: A Detailed Presentation of the NaturalOWL System"**. *Technical Report, Natural Language Processing Group, Department of Informatics, Athens University of Economics and Business, 2012.*

8. PARTICIPATION IN RESEARCH PROJECTS

"DILiGENt – Domain-Independent Language Generation" (2015-2017). EPSRC project.

"BioASQ – A Challenge on Large-Scale Biomedical Semantic Indexing and Question Answering" (2014). European FP7-ICT project.

"A linear programming approach to multi-document text summarization and natural language generation from ontologies" (2011-12). AUEB Basic Research Funding Program (BRFP) project.

"INDIGO – Interaction with Personality and Dialogue Enabled Robots" (2008–10).
European FP6-IST project.